

**SYSTEM OR METHOD
FOR IDENTIFYING A REGION-OF-INTEREST IN AN IMAGE**

ABSTRACT OF THE DISCLOSURE

The disclosed segmentation method and system (collectively “system”) identifies a region-of-interest within an ambient image captured by a sensor. The ambient image includes the target image (the “segmented image” of the target), as well as the area surrounding the target. The disclosed system purposely “under-segments” the ambient image, and the process is typically followed by a subsequent segmentation process to remove the portions of the region-of-interest image that do not represent the segmented image. The system compares the ambient image captured by the sensor with a template ambient image without a target to assist in identifying the region-of-interest. The system performs a watershed heuristic to further remove portions of the ambient image from the region-of-interest. In a safety restraint embodiment of the system, the region-of-interest can be used by the safety restraint application to determine the classification of the vehicle occupant, and motion characteristics relating to the occupant.